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SOURCES OF SUPPLY AND CONDITIONS OF EMPLOYMENT OF HARVEST LABOR IN THE WHEAT BELT.

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SCOPE OF INVESTIGATION.

The wheat harvest of the central wheat belt each year requires the services of more than 100,000 harvest hands from other States. Two other bulletins have described the conditions controlling the demand for harvest laborers and the methods of their mobilization and distribution, and furnished considerable information about the harvest hands themselves.¹ The present bulletin discusses the conditions of employment in the wheat harvest as described by the harvesters themselves.

The facts presented were obtained by personal interview with 1,174 harvesters. The majority of these were interviewed when they applied for harvest work at Federal-State employment offices in the Wheat belt.² Many were interviewed on the streets and around depots and railroad yards of wheat towns or while working on farms.

SOURCES OF HARVEST HANDS.

Of 1,105 giving information on the point, only 15 per cent were residents of the State in which they were interviewed, 70.1 per cent had permanent places of residence in other States, and 14.9 per cent

¹ Harvest labor problems in the Wheat Belt, by Don D. Lescohier, U. S. Dept. of Agr. Bul. 1020, 1922. Conditions affecting the demand for harvest labor in the Wheat Belt, by Don D. Lescohier, U. S. Dept. of Agr. Bul. 1230, 1924.

² A field agent was stationed successively at the Federal-State employment offices at Fort Worth, Tex.; Enid, Okla.; Wichita, Hutchinson, Salina and Colby, Kans.; Sioux City, Ia.; Fargo and Grand Forks, N. Dak. Information was also obtained from harvest hands on the streets of a number of other towns in Kansas: Lincoln and Aurora, Neb.; Aberdeen, S. Dak.; Oakes, Jamestown, Devils' Lake, New Rockford, Grand Forks, and a few other towns in North Dakota.

NOTE. Josiah C. Folsom, Bureau of Agricultural Economics, gave valuable assistance in the preparation of this report for publication.

were migratory workers without permanent places of residence. (See fig. 1.)

Table 1 shows the States from which 930 of the harvesters interviewed came to the harvest. It also gives the geographical sources of 10,586 other harvest hands who applied for work at Federal-State employment offices in the Wheat Belt. The table shows that approximately 80 per cent of the harvest hands interviewed were residents of the wheat States and the tier of States immediately east of them. In other words, the Mississippi Valley furnishes more than three-fourths of the transient harvest hands. Only 4.4 per cent came from the New England and Middle Atlantic States, and 0.7 per cent from the Pacific seaboard. Michigan, Ohio, Indiana, Kentucky and Tennessee mark the eastern border of the important sources of harvest labor supply, while none of the States west of the Wheat Belt contribute to it in an important way, except Montana. Table 1 does not show Montana's contribution to have been important in 1921, but in years when the northeastern Montana crops are not good large numbers of Montana farmers come to the North Dakota harvest.

TABLE 1.—States from which 11,516 harvest hands came to harvest of 1921.

States from which harvesters came.	Number interviewed by field group.	Number reported by Federal-State employment offices.	Total of both groups.	Per cent of total from each State.
Alabama.....	2	145	147	1.3
Arkansas.....	49	276	325	2.8
California.....	17	48	65	.5
Colorado.....	13	69	82	.7
Connecticut.....	1	13	14	.1
Florida.....	3	18	21	.2
Georgia.....	3	35	38	.3
Illinois.....	50	1,207	1,257	10.9
Indiana.....	11	295	306	2.7
Iowa.....	49	606	655	5.7
Kansas.....	72	831	903	7.8
Kentucky.....	12	171	183	1.6
Louisiana.....	5	95	100	.9
Maine.....	1	7	8	.1
Massachusetts.....	1	63	67	.6
Michigan.....	22	316	338	2.9
Minnesota.....	160	613	773	6.7
Mississippi.....	1	94	95	.8
Missouri.....	99	2,722	2,821	24.5
Montana.....	13	53	66	.5
Nebraska.....	23	239	262	2.3
New Jersey.....	1	20	21	.2
New Mexico.....	2	16	18	.2
New York.....	9	157	166	1.4
North Carolina.....	2	32	34	.3
North Dakota.....	40	42	82	.7
Ohio.....	17	397	414	3.6
Oklahoma.....	96	586	682	5.9
Oregon.....	2	.....	2	(1)
Pennsylvania.....	19	213	232	2.0
South Dakota.....	10	69	79	.7
Tennessee.....	18	314	332	2.9
Texas.....	14	450	464	4.3
Utah.....	1	17	18	.2
Washington.....	7	13	20	.2
Wisconsin.....	43	314	357	3.1
Wyoming.....	4	17	18	.2
Canada.....	3	16	19	.2
Mexico.....	2	.....	2	(1)
Total.....	930	10,586	11,516	100.0

¹ Less than 0.1 per cent.

Of a group of 995 harvest hands interviewed 110 were born in 23 foreign countries; 88 of them came from non-English-speaking countries. Over a third of these harvest hands were Scandinavians by birth; the remainder came from other parts of Europe, Canada, Hawaii, and South America. Thirty-seven immigrants were included among 148 migratory workers having no permanent places of residence; the percentage of foreign born having no permanent place of residence was nearly three times that of the homeless native born.



FIG. 1.—A typical group of harvest hands in the southern area. Most of these men worked in the Kansas harvest and then came north to the Dakota harvest.

REGULAR OCCUPATIONS OF HARVEST HANDS.

What proportion of the harvest hands were born and raised on the farm? This question is answered in Table 2. Considering the fact that all of these men were engaged in an agricultural occupation when interviewed, it is at first surprising to find that nearly half of them were city bred (44.6 per cent) and that over half (52.9 per cent) found their first job for wages in a nonagricultural occupation. This table demonstrates a fact that the wheat farmer, especially in the spring-wheat area, now clearly comprehends: Agriculture is dependent upon the industrial labor supply for so large a portion of its seasonal labor that the state of employment in cities, and the wages, hours, and conditions of employment in urban occupations largely determine the amount of labor available for farm work in any given season and the price which the farmer must pay for it. Many wheat farmers, especially in the Dakotas, told the writer that the most critical difficulty which they saw in the farm-labor situation was the inability of agriculture to compete with some of the urban industries in wage rates.

TABLE 2.—*Number of harvest hands interviewed who were born and raised on farms and in cities; and number whose first jobs were in specified industries.*

State in which interviewed.	Number who were—		Number whose first job—		Number whose first jobs were in specified types of industry.											
	Raised on farms.	Raised in cities.	Was on a farm.	Was not on a farm.	Farming.	Lumbering.	Factory work.	Building and construction.	Railroad work.	Unclassified common labor.	Oil fields.	Hotel, restaurant or cooking.	Marine occupation.	Mercantile and clerical.	Mining.	Miscellaneous.
Texas, Oklahoma, Kansas.	296	176	229	250	229	3	45	16	14	96	14	9	6	7	28	12
Iowa, Nebraska, South Dakota. . .	116	90	124	74	124	1	32	4	6	8	3	2	1	10	3	4
North Dakota, Minnesota.	211	236	175	270	175	14	95	23	20	52	1	3	5	11	14	32
Total.	623	502	528	594	528	18	172	43	40	156	18	14	12	28	45	48
Combined totals.	1,125	1,122								1,122						
Percentage of combined totals. . .	55.4	44.6	47.1	52.9	47.1	1.6	15.3	3.8	3.6	13.9	1.6	1.2	1.1	2.5	4.0	4.3



FIG. 2.—A North Dakota threshing crew. (Owner of farm stands at extreme right.)

Table 3, which shows the customary occupations of 14,133 harvesters, further illustrates the dependence of the wheat harvest upon the industrial labor supply. Agriculture itself furnished but 29.2 per cent of these harvesters. Most of them were farmers and farmers' sons from Arkansas, Missouri, Texas, Oklahoma, eastern Kansas, and Iowa who had completed their own harvests and had come to the wheat harvests to earn some extra money. (See fig. 3.) The remainder were migratory farm hands. These, however, were few

in number—less than one-fourth of the men classified as of agricultural occupations. One-third of the entire number were "laborers" who worked at various kinds of seasonal work requiring a minimum of skill, such as railroad "extra gang" work, road construction, swamping in the woods, dish washing in restaurants, trucking, and other common labor in factories. They were men of no particular occupation, as shown by many of them naming from 3 to 8 or 10 particular kinds of work in which they ordinarily sought employment. For most of the laborers interviewed harvesting was one of the occupations which they included in their annual cycle regularly or intermittently.

TABLE 3.—Customary occupations of 14,133 harvest hands interviewed in wheat belt in 1921.

Customary occupations.	Applicants for harvest work—							
	Interviewed by field group.		At Sioux City employment office.		At other employment offices.		Total.	
	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.
Farmers and farm laborers.....	296	27.0	840	36.0	2,994	28.0	4,130	29.2
Laborers, city and floating.....	226	20.6	339	14.6	4,089	38.2	4,654	32.9
Mechanical and skilled trades, building trades, manufactures, miscellaneous.....	211	19.3	530	22.7	1,921	18.0	2,662	18.8
Miners.....	46	4.2	26	1.1	179	1.7	251	1.8
Railroad employees, except laborers.....	47	4.3	81	3.5	432	4.0	560	4.0
Semiskilled occupations, except factory.....	126	11.5	240	10.3	271	2.5	637	4.5
Factory operatives, except men with trades.....	79	7.2	131	5.6	193	1.8	403	2.9
Office help, stenographers, bookkeepers, clerks.....	13	1.2	35	1.5	161	1.5	209	1.5
Professional men and Government employees.....	6	.6	12	.5	13	.1	31	.2
Business men.....	13	1.2	30	1.3	131	1.2	174	1.2
Students.....	32	2.9	68	2.9	322	3.0	422	3.0
Total.....	1,095	100.0	2,332	100.0	10,706	100.0	14,133	100.0

NOTE.—In order to compare this table with Table 8 on page 21 of Department Bulletin 1020, Harvest labor problems in the Wheat Belt, it will be necessary to make the following rearrangement of Table 8. In Table 3, "chauffeurs," "teamsters," and "others" are classified as "semiskilled occupations;" "office help" and "bookkeepers" are combined; "sailors" are grouped with "mechanical and skilled trades" and "contractors" with "business men."

It was possible to obtain definite information concerning the present occupations of 623 harvesters born on farms. Sixty-three of these were operating farms and 199 were farm laborers. Ninety of the latter group were farmers' sons still living at home and 109 were migratory farm hands; 42 per cent, therefore, were regularly engaged in agricultural pursuits. Twelve (2 per cent) were students. The other 56 per cent were distributed among 52 industrial occupations. Thirty had become skilled craftsmen in 7 of the building trades. Sixty had become factory craftsmen, such as machinists, boiler makers, printers, molders, acetylene welders and jewelry makers. Seventeen were miners, 12 skilled oil-field workers, and 7 had learned other trades. Thirty had entered semiskilled occupations. One had become a teacher, and 2 were salesmen. Twelve were college students. In all, 433, or 69.5 per cent, of these laborers born on farms had either remained in agriculture or learned occupations requiring skill. The other 30.5 per cent were common laborers.

Table 4 shows the amount of education attained by 1,016 harvest hands. It will be noted that 32 per cent had not completed the eighth grade, and that 73.5 per cent had no education beyond the grammar grades. This figure corresponds closely with the percentages obtained in the harvest of 1920, 75.8 per cent.³ It was

somewhat surprising to find that 20.3 per cent of the harvesters interviewed had attended high school, but this high percentage is in part accounted for by the fact that many young men making the harvest have not completed their education and will eventually become professional or business men. Table 5 shows

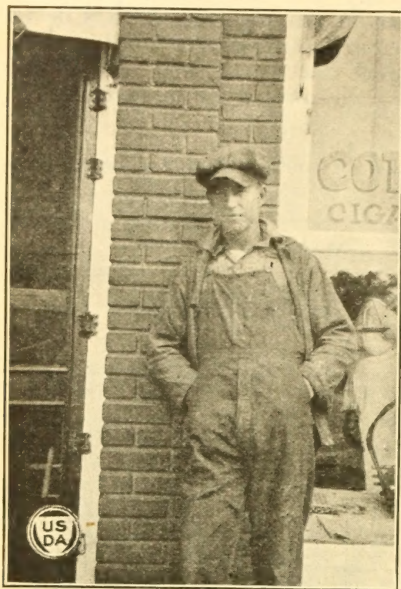


FIG. 3.—An inexperienced Kansas harvest hand. This lad, a Southern farmer's son, was making the harvest for the sixth time. Thousands of sturdy, clean and competent farmer boys from Arkansas, Missouri, Iowa, and other States close to the Kansas wheat belt come to the harvest each year. They represent the backbone of the Kansas harvest force.

that 38.4 per cent of the group were under 25 years of age. A good many of these were earning money to complete their education.

The contrast shown by Table 4 between the skilled workmen, mechanics, miners, railroad men, and skilled factory hands on the one hand, and the farmers and laborers on the other, in the matter of education, is interesting. More than 25 per cent (25.6 per cent) of the skilled workmen had attended high school and 7.3 per cent had attended trade schools or night schools. Only 15.1 per cent of the farmers and 17.5 per cent of the laborers had attended high school and but very few had attended technical schools. Only 19.8 per cent of the skilled workmen had failed to complete the eighth grade, as compared with 36.7 per cent of the farmers and farm hands and 41.7 per cent of the laborers.



FIG. 4.—Arkansas farmer in a southern Kansas wheat field. One of the finest types of harvest hand found in the winter wheat harvest.

³ Bulletin 1020, U. S. Dept. of Agr., p. 18.

TABLE 4.—*Extent and character of education of 1,016 harvest hands.*

Amount of education.	Farmers and farm hands.		Laborers.		Skilled workmen.		Miscellaneous occupations.		Total.	
	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.	Num-ber.	Per-cent.
Less than fifth grade.....	38	14.4	76	21.4	23	7.0	8	11.6	145	14.3
Fifth, sixth, seventh grades...	59	22.3	72	20.3	42	12.8	7	10.2	180	17.7
Finished eighth grade.....	119	45.1	136	38.3	144	43.9	23	33.3	422	41.5
One to three years of high school.....	31	11.7	43	12.1	72	21.9	15	21.7	161	15.8
Finished high school.....	9	3.4	19	5.4	12	3.7	6	8.7	46	4.5
Agricultural or trade school (in addition to eighth grade).....	5	1.9	1	.3	12	3.7	1	1.4	19	1.9
Business college (in addition to eighth grade).....	2	.8	3	.8	5	1.5	2	2.9	12	1.2
Night-school work.....			1	.3	12	3.7			13	1.3
College (incomplete in most cases).....	1	.4	4	1.1	6	1.8	7	10.2	18	1.8
Total.....	264	100.0	355	100.0	328	100.0	69	100.0	1,016	100.0

Table 5 shows that only 17.7 per cent of the harvesters interviewed were married men, and some of these were not supporting their families. More than 56 per cent were less than 30 years of age. The harvest army is principally composed of single men and of young men. A study of the extent to which harvest hands were supporting dependents, whether wives, children, parents, or other relatives, showed that 77.8 per cent of them were supporting only themselves or living at home, but that 16.3 per cent were supporting wives and children, and 5.9 per cent were supporting other relatives, generally their mothers.

Among the harvest hands interviewed there were 71 farmers who were operating farms which they owned in neighboring States and 4 operating farms which they rented. These men left their farms and "made" the harvest as a "cash crop." These were 6.5 per cent of all the harvest hands interviewed. The investigators in 1920 showed an even larger proportion of farmers among the harvest hands interviewed, particularly in the winter-wheat area. A considerable number of Minnesota and Montana farmers are found in the Dakota harvests each year. The writer believes that it is safe to say that 5 per cent of the Kansas and North Dakota harvest laborers each year are operating farmers from neighboring areas who have left their farms temporarily to work in the harvest. It is probable that the total number of farmers who make the harvest ranges in different years from 5,000 to 15,000 men. Some of these are trying to supplement the income from a farm not able to support a family; some are earning funds to meet debts or to buy more land, a team, a piece of machinery, or other equipment.

TABLE 5.—*Age and marital condition of harvest hands by States where interviewed.*

State where interviewed.	Marital condition.				Age (years).												
	Total cases.	Married.	Single or widowed.	Not reported.	14 to 16.	17 to 18.	19 to 21.	22 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 or over.	Unknown.
Texas.....	12	4	8	.....	.....	1	.....	1	2	.....	2	2	.....	.....	.....	2	1
Oklahoma.....	46	15	28	3	.....	1	7	8	10	9	6	1	2	.....	.....	.....	2
Kansas.....	437	96	301	40	8	23	72	75	70	44	42	32	24	7	8	10	22
Iowa, (Sioux City).....	193	28	163	2	.....	6	23	34	33	14	28	16	10	15	5	5	4
Nebraska.....	8	.....	7	1	.....	1	2	.....	3	1	1	.....	.....	.....	.....	.....	.....
South Dakota.....	10	.....	7	3	.....	1	.....	1	4	.....	1	.....	.....	2	.....	.....	1
North Dakota.....	455	62	380	13	3	25	74	81	86	57	45	22	17	17	9	12	7
Total.....	1,161	205	894	62	11	58	178	200	208	125	125	73	53	42	22	29	37
Per cent of total.....	100.0	17.7	77.0	5.3	0.9	5.0	15.3	17.2	17.9	10.8	10.8	6.3	4.6	3.6	1.9	2.5	3.2

There was another group of farmers of a different type—56 of whom had formerly operated their own farms and 55 of whom had formerly operated rented farms. These 111 men, 9.5 per cent of all of the men interviewed, had in most cases failed as farmers. Forty-four of them stated that they had failed because of poor financial management, and 14 that their failure was due to poor crops and excessive rents. Six who said they became discouraged can probably be included with those unable to make a financial success as farmers. In short, 57.7 per cent of the 111 former operators of farms had proven incompetent as farm operators: of the remainder, 10 had withdrawn from farming to invest in other lines of business, but had not succeeded in the new lines; 2 had left the farm because of illness, and 17 because of the death of their wives or separation from them; 3 had wanted to move to town to educate children, 2 had sold out and entered the Army, and 5 had retired; 6 had been forced off rented farms by the sale of the farms.

In short, all but 10 of the 111 men who had dropped from the status of operating farmers into that of day laborers seem to have become laborers because they lacked some quality essential to success in agriculture.

It will be noted that only about half (53 per cent) of the men classed as migratory farm laborers do farm work exclusively. (See Table 6.) If the group classed as laborers working on farms intermittently be added, only 38.5 per cent of the migratory farm workers do farm work exclusively. The table again illustrates the fact that agriculture, in so far as it depends for hired labor upon others than "the neighbor's boys," competes with industry for a part of the industrial labor supply.

TABLE 6.—*Classification of 282 farm laborers with respect to age, place of birth, work done, and whether migratory or resident farm laborers.*

Classified characteristics of farm laborers interviewed in Wheat Belt.	Migratory farm laborers.				Farmers' sons working as month hands on fathers' farms.			Laborers who work on farms by month intermittently.				Grand total.	
	Less than 25 years of age.	25 to 40 years of age.	41 years and above.	Total of group.	Less than 25 years of age.	25 to 40 years of age.	Total of group.	Less than 25 years of age.	25 to 40 years of age.	41 years and above.	Total of group.	Total of all groups.	Percentage.
Number who do farm work exclusively.....	23	34	17	74	59	10	69	.....	.....	.....	.....	133	47.2
Number who do farm work and common labor.....	3	33	14	50	12	7	19	28	12	6	46	125	44.3
Number who do farm work and skilled labor work.....	5	6	4	15	2	.....	2	5	2	.....	7	24	8.5
Total.....	31	73	35	139	73	17	90	33	14	6	53	282	100.0
Born on farm.....	27	57	31	115	67	17	84	15	8	5	29	228	80.9
Not born on farm.....	4	16	4	24	6	.....	6	17	6	1	24	54	19.1
Total.....	31	73	35	139	73	17	90	33	14	6	53	282	100.0
Born in central west.....	29	60	22	111	71	16	87	22	10	4	36	234	83.0
Born elsewhere in United States.....	.....	3	7	10	1	.....	1	8	.....	.....	8	19	6.7
Born in foreign countries.....	2	10	6	18	1	1	2	3	4	2	9	29	10.3
Total.....	31	73	35	139	73	17	90	33	14	6	53	282	100.0

AMOUNT OF UNEMPLOYMENT.

An effort was made to discover the amount of unemployment the harvest hands had experienced during the year previous to the harvest. There were two reasons for this inquiry: To ascertain the extent to which unemployment had caused the workmen in non-agricultural industries to come to the harvest, and to discover what proportion of the harvest hands were men who "regularly worked irregularly." Table 3, which shows that approximately 35 per cent of 14,133 of the harvest hands were of various skilled and semiskilled urban occupations, suggests that unemployment must be important among the reasons why men come to the harvest. Figures for 17,767 men in the 1919 and 1920 harvests almost exactly corroborate the 1921 figures.⁴ Many men were unable to give definite information concerning the number of jobs they had had and the time they had lost during the preceding year, and such men as farmers, students, and business men did not come within the scope of the inquiry.

Information was obtained from 964 men upon the question of unemployment: of these 22.3 per cent had lost less than 1 month's time during the year previous to the harvest and 16.9 per cent less than 2 months. Inasmuch as 1920-21 was a year of distinct depression in most industries and unemployment more widespread than during the

⁴ Harvest Labor Problems in the Wheat Belt, op. cit., p. 21.

6 years preceding, these figures show a fair percentage of men who had had relatively steady work. It is a low figure, however, compared with the facts for the entire number of wage earners in American industry. It is safe to state that the proportion of wage earners in the United States who suffered less than 2 months unemployment between the summer of 1920 and that of 1921 would exceed 50 per cent.⁵

Looking at the matter conversely, almost 61 per cent of this group of harvest hands had lost more than 2 months and 44.5 per cent more than 3 months during the year. Sixty-two (6.5 per cent) said they had worked less than 6 months of the year.

Concerning the number of jobs upon which they had been employed during the year, only 774 out of the 964 men were able to give reliable information. Of these, 168 (21.7 per cent) had worked on but one job during the year and 41 per cent on but two jobs. Nearly 63 per cent of this group and over 50 per cent of the 964 men had worked on but one or two jobs. Some of them left their jobs to come to the harvest; the others quit or were "laid off" and were idle for periods ranging from 1 to 10 weeks before coming to the wheat harvest.

One hundred and forty-eight (19.1 per cent) worked on three jobs and 66 (8.5 per cent) on four jobs during the year. The other 75 (9.7 per cent) had worked on from five to a dozen jobs during the year and were distinctly of the restless, migratory type of laborers who work as little as they can and never stick anywhere very long.

EXPERIENCE IN HARVESTING.

The amount of experience which 14,168 harvest hands had had in the harvest of the Wheat Belt is shown by Table 7. It will be noted that almost one-third of the group were inexperienced. It must be remembered when considering this figure that the group under discussion were nearly all transient harvest hands. The percentage of inexperienced men would be somewhat smaller in the quota of men furnished by the farms and towns of the Wheat Belt itself. On the other hand, it is significant that 69.4 per cent of these men had "made the harvest" at least once before and that 38 per cent had worked in four or more harvests. Among 1,124 men interviewed by the field group about one-fourth claimed more than 10 seasons' experience and 78.3 per cent said that they had worked in one or more harvests during the preceding 5 years.

⁵ Cf. The Labor Market, D. D. Lescoghier, chap. 3, 13. Unemployment survey, 1920-21, American Labor Legislation Review, September, 1921.

TABLE 7.—*Harvest experience of wheat harvest hands interviewed in 1921.*

Harvest experience (seasons).	Harvest hands interviewed.							
	At Federal-State employment offices in—				By field group.		Total.	
	Sioux City.		Other cities.					
	Number.	Per cent.	Number	Per cent.	Number.	Per cent.	Number.	Per cent.
	First.....	470	20.1	3,693	34.5	175	15.6	4,448	30.6
Second.....	409	17.5	2,226	20.8	119	10.6	2,754	19.4
Third.....	298	12.7	1,320	12.3	82	7.3	1,700	12.0
Fourth or over.....	1,165	49.7	3,463	32.4	748	66.5	5,376	38.0
Total.....	2,342	100.0	10,702	100.0	1,124	100.0	14,168	100.0

The high percentages of experienced men among those interviewed should be kept in mind when considering the subsequent tables in this bulletin. They indicate that the facts given in the remainder of the bulletin are typical of the experience of the harvest hands in general and not simply of inexperienced harvest hands.



FIG. 5.—Riding a freight to harvest fields near New Rockford, N. Dak. A common sight throughout the Wheat Belt. Many of these riders are not hoboes, but such methods of travel throw the farmer boy, city workmen, and college student into too close contact with the hobo, the thug, and the gambler. They result in many murders and robberies each year during the harvest and in the demoralization of some of the harvesters.

METHODS OF TRANSPORTATION TO PLACE OF WORK.

Approximately 60 (59.8) per cent of the harvest hands interviewed rode freight trains to the harvest, while 35.6 per cent paid their fares on passenger trains. (See fig. 5.) Less than 1 per cent were

"shipped" on "free fares" by employment agencies, and 3.7 per cent came in their own autos. Incidentally, only 52.3 per cent of them came alone. The others all traveled with one or more companions.

OBJECTIONABLE ASPECTS OF TRAVEL ON FREIGHT TRAINS.

Traveling on freight trains has become a typical characteristic of the American wheat harvest; it hardly exists in Canada. From every point of view it is one of the most objectionable aspects of the



FIG. 6.—Ho! For the harvest fields. A truck load of harvest hands leaving Wichita for the harvest fields of southern Kansas. Farmers frequently send trucks from 50 to 150 miles to the labor centers to gather up crews and transport them to their farms. Thousands of harvest hands are now taken out to the farms by auto.

harvest. It is dangerous, for freight wrecks are more frequent than passenger wrecks. (See fig. 7.) Gunmen, gamblers, and other criminals come to the harvest and ride the freights to carry on their nefarious activities. Most of the murders, highway robberies, and



FIG. 7.—One of the objections to riding the freights. This train carried harvest hands.

other crimes that occur during the harvest occur on freight trains and in or around freight yards. The railroad officials and police of the cities and towns in the Wheat Belt make commendable efforts to abate the nuisance, but it is impossible for them to control the

situation. Young men riding the freights are compelled to associate with criminals, tramps, and hoboes, and are subjected to the temptation to become migratory workers themselves. Many of the hoboes have "smooth tongues," and the "romancing" in which they indulge concerning their travels and experiences fires the imagination of many a young man to "see the world." One can hardly be in the company of a group of genuine hoboes for an hour without hearing many



FIG. 8.—Hiring harvest hands. Two farmers interviewing hands in city park of a wheat town in Kansas.

sophisticated allusions to various distant places, and the eager interest of the young and untraveled stimulates them to exhibit their wares, true and false, to the utmost. The life histories obtained by the field group from hundreds of hoboes show that it was just such



FIG. 9.—Harvesters waiting for farmers to "pick them up."

experiences in their youth that turned many of them from ordinary ways of living to their irregular, irresponsible life habits.

Freight trains are also a very unsatisfactory means of distributing harvest labor to the farmers. Men traveling by freight, especially when going considerable distances, take so much longer to reach their destinations that they do not relieve labor shortages quickly. On the other hand, while they are en route, the farmers keep calling for

men, and when the harvesters do finally arrive they are likely to arrive in excessive numbers. Farmers are bound to lose more grain by shattering when the men travel by freight than when they travel by passenger trains. Harvest hands are certain to encounter local labor surpluses more frequently, and be unable to get work when traveling by freight. They must also lose many more days' time during the harvest when riding freights, because of the extra time required to shift from one area to another.

The employment office and agricultural officials, moreover, find their efforts to control the flow of harvest labor much less difficult when the laborers travel on passenger trains, as in Canada. The railroads are able to furnish the employment service, as needed, with daily figures showing the number of men who have gone to each locality. If their work is properly organized, the employment officials can largely control the flow of the labor which does not come to the employment offices as well as of that which does. But when the workers are riding the freights it is not possible to keep any accurate account of the volume of the movement along each railroad and its branches.⁶ The United States Employment Service sends "scouts" to watch the movement of men by freight trains and estimate its volume, but is unable to do more than roughly guess at the flow of labor along the different railroad routes.

METHODS OF OBTAINING EMPLOYMENT.

Harvest hands use a variety of means to obtain work when they arrive in the harvest area. (See Table 8.) Two-thirds of those interviewed depended principally upon picking up jobs by interviews with farmers met on the streets of labor-distribution centers like Enid, Wichita, Hutchinson, Sioux City, Aberdeen, Fargo, and Grand Forks, or "wheat towns" like Larned and Great Bend, Kans., or Oakes, Hillsboro, or New Rockford, N. Dak. (See figs. 8 and 9.) Obviously, much of the service of the employment offices furnishing harvest labor must consist in directing the flow of that labor which does not come to the offices to obtain work, but relies upon its own initiative. This labor must be guided in proper quantities into the several towns of the counties needing labor.

It will be noted in the table that the use of private fee-charging employment agencies was important only among the men interviewed at Sioux City and in North Dakota. In these two areas a considerable number of men were interviewed who had used private agencies in Kansas City, Omaha, Sioux City, and Minneapolis. These were mostly migratory laborers, who worked at seasonal employment like railroad "extra gang" work, road construction, lumbering, and harvest work, and were accustomed to the use of fee-charging agencies to find jobs.

⁶ Detailed discussion of this problem, including a description of the Canadian system, appears in Bulletin 1020, pp. 28-30.

TABLE 8.—*Methods of seeking employment used by 1,164 harvest hands, by States in which interviewed.*

State.	Number who used									
	Public employment offices.		Private employment offices.		Newspaper advertisements and hearsay information.		Applications to farmers—			
							Generally met on street or at railroad depots.		With whom acquainted, either by previous correspondence or contract.	
	Exclusively or in part.	Exclusively.	Exclusively or in part.	Exclusively.	Exclusively or in part.	Exclusively.			Exclusively or in part.	Exclusively.
Texas.....	2	2	-----	-----	2	1	8	7	2	2
Oklahoma.....	14	9	1	-----	6	2	26	18	2	1
Kansas.....	170	71	8	-----	12	3	327	135	12	4
Iowa (Sioux City).....	147	30	61	-----	9	1	105	13	22	1
Nebraska.....	2	2	1	1	1	1	3	2	2	-----
South Dakota and North Dakota.....	326	78	95	2	6	-----	301	28	57	2
Total.....	661	192	166	3	36	8	770	203	97	10
Percentage.....	56.8	16.5	14.3	0.3	3.1	0.7	66.2	17.4	8.3	0.9

DIFFICULTY IN OBTAINING REEMPLOYMENT.

More than half of the harvesters interviewed stated that they obtained their first jobs within three days after they reached the harvest area. Very few who really wanted work were unable to get work within a week. The harvest hand's difficulties do not ordinarily begin at the point where he enters the harvest, but when he finishes his first job. He is then on a farm near some small interior town and out of touch with the sources of information which could advise him where his work is needed next. Guided by such information as he is able to obtain, or following the route traversed by whatever railroad happens to be nearest, he moves on in quest of another job. He frequently wanders for a week or two before obtaining work again. Many men find job after job, only to have each terminate in two or three days and be followed by more travel and hotel bills. It is this loss of time between jobs, and the expense of travel and support, that eat up the harvester's earnings.

In Table 9 the experiences of 998 men are summarized. It will be noted that the 998 men who furnished the information had worked but 51.2 per cent of the time that they were in the harvest area, and that this percentage represents the experience both of those who had been a short time in the harvest area and of those who had worked in both the winter-wheat and the spring-wheat harvests. Subsequent tables show how this loss of half of his time eats up the "stake" of many a harvest hand.

TABLE 9.—Average number of days worked and lost per man during harvest to date of interview.

Days from arrival in harvest area to date of interview	Men in group.	Days in harvest area per group			Per cent of time in harvest area per group		Average number of days per man in harvest area.		
		Total.	Worked.	Lost.	Worked.	Lost.	From arrival to interview.	Worked.	Lost.
Not over 30.....	872	10,783	5,542	5,241	51.4	48.6	12.37	6.36	6.01
31 to 45.....	86	3,266	1,742	1,524	53.3	46.7	37.98	20.26	17.72
46 to 60.....	31	1,625	736	889	45.3	54.7	52.42	23.74	28.68
61 to 75.....	9	614	312	302	50.8	49.2	68.22	34.67	33.56
Total.....	998	16,288	8,332	7,956	51.2	48.8	16.32	8.35	7.97

WAGE RATES IN THE HARVEST.

Table 10 contains data on the wages received by harvest hands in 1921. The figures agree with those furnished by the farmers.⁷ The wage rates in excess of \$6 are all threshing wages paid to especially skilled men, such as engine men and separator men. The prevalence of a \$4 wage for harvesters in south-central Kansas and northern Oklahoma, of a \$5 wage in central and western Kansas, and of rates running from \$3 to \$4 in Nebraska, the Dakotas, and Minnesota is shown by the table.

NET EARNINGS OF HARVEST HANDS.

The series of Tables 11 to 14 and Tables I and II of the Appendix comprise a study of the actual earnings of harvesters able to furnish data on the subject. Most of these men had not completed their harvest work, and their final earnings—or losses—would vary from the figures given. Tables 13 and 14 give the final figures on earnings of a portion of these men in the 1919 and 1920 harvests.

TABLE 10.—Daily wages received by wheat harvest hands on 1,050 jobs in 1921.

	Texas.	Oklahoma.	Kansas.	Nebraska.	South Dakota.	North Dakota.	Minnesota.	Iowa.	Total.	Per cent of total.
Rate of wages per day:										
\$1.50.....			2	1					3	.28
\$2.....			1			1	2	1	5	.48
\$2.50.....	1	1	3	3	1	7	2	8	26	2.48
\$3.....	1	11	15	11	11	39	31	4	123	11.71
\$3.50.....		2	2	6	22	71	15	4	122	11.62
\$4.....	3	51	132	23	15	93	29		346	32.95
\$4.50.....		6	9	3	3	20	2	2	45	4.29
\$5.....	1	39	192	4	5	21	1	8	271	25.81
\$5.50.....			1			4			5	.48
\$6.....		4	28	1	1	7	1	2	44	4.19
\$6.50.....			3			1			4	.38
\$7.....		4	9			1	1		15	1.43
\$7.50.....			2				1		3	.28
\$8.....		3	11			4	2		20	1.90
\$9.....			1				1		2	.19
\$10.....	2	2	3		1	3			11	1.05
\$12.....			1			1			2	.19
\$13.50.....						1			1	.10
\$14.....					1	1			2	.19
Total.....	8	123	415	52	60	275	88	29	1,050	100.00

⁷ Wage figures for the 1921 wheat harvest are presented in detail in Department Bulletin 1211.

In Table 11 are presented the earnings of 1,022 men in the 1921 harvest up to the time when interviewed. Only 735 had actually earned harvest wages previous to the date of the interview. The table shows that the average earnings of these 735 men had been \$55.74 each. Only 96 of them had earned more than \$100 each and but 11 had earned over \$200. In Table 12 are recorded the expenses which 885 of the 1,022 interviewed on the subject had to meet after entering the harvest area: 163 of them had had no expenses either because they had just arrived or because they had had a steady job from the time of arrival until the date of interview. Including these, the average subsistence expense of the group while idle was \$15.88; excluding them, it was \$19.47. Comparing the average earnings of the 735 men listed in Table 11 who had been employed and the average cost of subsistence of the 722 men who had incurred subsistence expenses, average earnings exceeded average expenses by \$36.27.

Some interesting contrasts are found in Tables I and II of the Appendix. The tables compare the experiences of the least successful and most successful (financially) of the harvesters interviewed in 1921.

TABLE 11.—*Total and average earnings of 1,022 harvest hands and numbers who had earned specific amounts to date when interviewed, classified by States.*

State where interviewed.	Number of men—		Earnings of men who had made money.		Harvest hands who had earned specified amounts when interviewed.							
	Giving information.	Who had earned.	Total.	Average.	Nothing.	Less than \$25.	\$25 to \$49.99.	\$50 to \$74.99.	\$75 to \$99.99.	\$100 to \$124.99.	\$125 to \$149.99.	\$150 or more.
Texas.....	8	1	\$12.00	\$12.00	7	1		2		1		
Oklahoma.....	45	13	486.00	37.38	32	4	6			1		
Kansas.....	396	268	11,372.00	42.43	128	64	103	73	18	8	2	
Iowa.....	158	123	7,811.00	63.50	35	15	35	33	22	11	2	5
Nebraska.....	5	5	328.00	65.60			2		2	1		
South Dakota.....	6	6	287.00	47.83		3	1	1			1	
North Dakota.....	404	319	20,675.00	64.81	85	59	84	79	32	28	14	23
Total.....	1,022	735	40,971.00	55.74	287	146	231	188	74	49	19	28

TABLE 12.—*Cost of subsistence (not including transportation expenses) of harvest hands to dates when interviewed while idle during harvest, classified by States.*

State where interviewed.	Number of harvest hands.	Cost of subsistence of harvest hands while idle in harvest area.								Average expense per man.
		No ex- pense.	Less than \$10.	\$10 to \$24.99.	\$25 to \$49.99.	\$50 to \$74.99.	\$75 to \$99.99.	\$100 and over.	Total expense of group.	
Texas.....	10	1	7	2					\$72.50	\$8.06
Oklahoma.....	19	1	10	6	2				196.50	10.92
Kansas.....	335	24	177	111	20	2	1		3,239.00	10.41
Iowa.....	137	29	19	42	36	10		1	3,074.00	28.46
Nebraska.....	5	2	3						12.50	4.17
South Dakota.....	6	4	1	1					55.00	27.50
North Dakota.....	373	102	72	109	40	27	15	8	7,409.00	27.34
Total.....	885	163	289	271	98	39	16	9	14,038.50	19.47
Percentage.....	100.0	18.4	32.7	30.6	11.1	4.4	1.8	1.0		

Table I of the Appendix records the amount of employment, number of jobs, earnings, and expenses of 32 harvest hands whose earnings were less than \$100 and expenses over \$50. The table includes all of the harvest hands interviewed of whom these two facts were true—they represent the most unfortunate harvesters encountered. These men had been in the harvest area, on the average, 42.4 days and had lost 69.4 per cent of their time. Thirty-one of the thirty-two had been a month or more in the harvest area; 16 of them more than 6 weeks. The group consists of men who had been in the harvest long enough, therefore, to make some money. Three of them had not worked at all, 8 had worked only 5 to 10 days. They had obtained on the average only 1.6 jobs per man. While unemployed they had to travel and to pay hotel and restaurant expenses. As a result, only 5 of the 32 had made any money. One of the five had been in the harvest 40 days and had cleared \$40—\$1 a day and his board. None of the others had done as well. Twenty-five of them had lost money, on the average \$46.33 per man, by coming to the harvest. The average loss of the 30 men reporting surplus or deficit was \$35.89. In Kansas, where the man who earned \$40 was employed, the current wages were \$4 to \$5 a day and board. His net earnings, therefore, were only from one-fifth to one-fourth of what they would have been if he had had steady employment.

Table II of the Appendix furnishes similar data upon the earnings and expenses of the men who had earned \$100 or more in the 1921 harvest. There were 83 of these, 7.1 per cent of the 1,164 men interviewed. The average period for which these 83 men had been in the harvest was almost the same as in the case of the 32 men just discussed. The 32 had averaged 42.4 days in the harvest, and the 83 averaged 41.1 days. But the latter group lost only a third instead of 69.4 per cent of their time. Instead of a loss of \$46.33 per man reporting deficit, they had cleared, on the average, \$101.28 per man reporting surplus. The average earnings of the 80 men reporting surplus or deficit was \$94.25. Their earnings per man were higher; their subsistence cost lower; their travel expenses a little higher. The principal reason that this group which worked more steadily spent more per man for travel expenses is that harvest hands with considerable money in their pockets ride on passenger trains, while the unsuccessful must travel on the freights. Comfort and self-respect cause men to prefer the passenger trains, while the danger of being robbed causes many to avoid the freights.

Thirty-two of the 115 men listed in Tables I and II of the Appendix who started harvesting in Texas, Oklahoma, or Kansas and followed the harvest north through the Dakotas reported their net earnings. Two earned over \$300 and one \$248; seven others cleared between \$100 and \$200. The other 22 had all cleared less than \$100 each and eight of them had spent more for subsistence and travel than they had earned.

In 1921, 696 men were interviewed who worked in the 1920 harvest and 703 who worked in the 1919 harvest. In Table 13 are shown the earnings in the 1920 harvest of 517 of these hands, and in Table 14 the earnings in 1919 of 443 hands. The wages in 1920 and 1919 ranged from \$6 to \$8 per day throughout the Wheat Belt, or roughly, a third higher than in 1921. Living costs for harvest hands were also high, but not so high in proportion to wages as in 1921. Restau-

rant and hotel prices did not drop so rapidly in 1920-21 as the cost of foodstuffs declined. Consequently, the 1919 and 1920 harvest hands had a little better chance "to make a stake" than the 1921 harvest hands enjoyed. The difference between these years and 1921 was also accentuated by a stronger demand for harvest hands, in proportion to the available supply, than in 1921. Of the men able to furnish definite information, one-fourth stated that their net earnings were over \$300 in 1920, one-fifth said they made over \$300 in 1919, approximately a fourth said that they cleared between \$200 and \$300. Nearly half of the group, therefore, made substantial "stakes" in 1919 and 1920. Most of these men declared that their 1921 earnings would fall far below those of the previous year because of the greater difficulty in getting work and the smaller margin between wages and hotel and restaurant prices.

TABLE 13.—*Earnings in 1920 harvest of 517 of the harvest hands interviewed in 1921 harvest.*

State where interviewed.	Total interviewed.	Number of men whose net earnings in 1920 were—										
		Not known to themselves.	None.	\$50 or less.	\$51 to \$74.	\$75 to \$99.	\$100 to \$149.	\$150 to \$199.	\$200 to \$249.	\$250 to \$299.	\$300 to \$349.	\$350 or over.
Texas.....	6	4										2
Oklahoma.....	30	10	5	2	1		2	2	2	1	2	3
Kansas.....	270	82	26	15	8	10	23	17	32	9	11	37
Iowa (Sioux City).....	112	12	10	11	8	3	18	16	14	7	4	9
Nebraska.....	7	3	1				1		1		1	
South Dakota.....	5	3										2
North Dakota.....	266	65	11	11	8	14	24	37	37	11	19	29
Total.....	696	179	53	39	25	27	68	72	86	28	37	82
Per cent of all (696) cases	100	25.7	7.6	5.6	3.6	3.9	9.8	10.3	12.4	4.0	5.3	11.8
Per cent of cases (517) reporting earnings.....	100		10.3	7.5	4.8	5.2	13.2	13.9	16.6	5.4	7.2	15.9

TABLE 14.—*Earnings in 1919 harvest of 443 of the harvest hands interviewed in 1921 harvest.*

Place where interviewed.	Total number of men interviewed.	Number of men whose net earnings in 1919 were—										
		Not known by themselves.	None.	\$50 or less.	\$51 to \$74.	\$75 to \$99.	\$100 to \$149.	\$150 to \$199.	\$200 to \$249.	\$250 to \$299.	\$300 to \$349.	\$350 or over.
Texas.....	7	4								1	1	1
Oklahoma.....	32	11	1	1	1	4	2	4	1		2	5
Kansas.....	291	121	17	22	7	6	24	16	28	11	11	28
Iowa (Sioux City).....	129	29	5	17	1	7	16	8	21	6	7	12
Nebraska.....	8	5	1				1					1
South Dakota.....	6	3							1		2	
North Dakota.....	230	87	11	7	6	10	33	21	25	6	7	17
Total.....	703	260	35	47	15	27	76	49	76	24	30	64
Per cent of total.....	100	37	5.0	6.7	2.1	3.8	10.8	7.0	10.8	3.4	4.3	9.1
Per cent of cases (443) reporting earnings.....	100		7.9	10.6	3.4	6.1	17.2	11.0	17.2	5.4	6.8	14.4

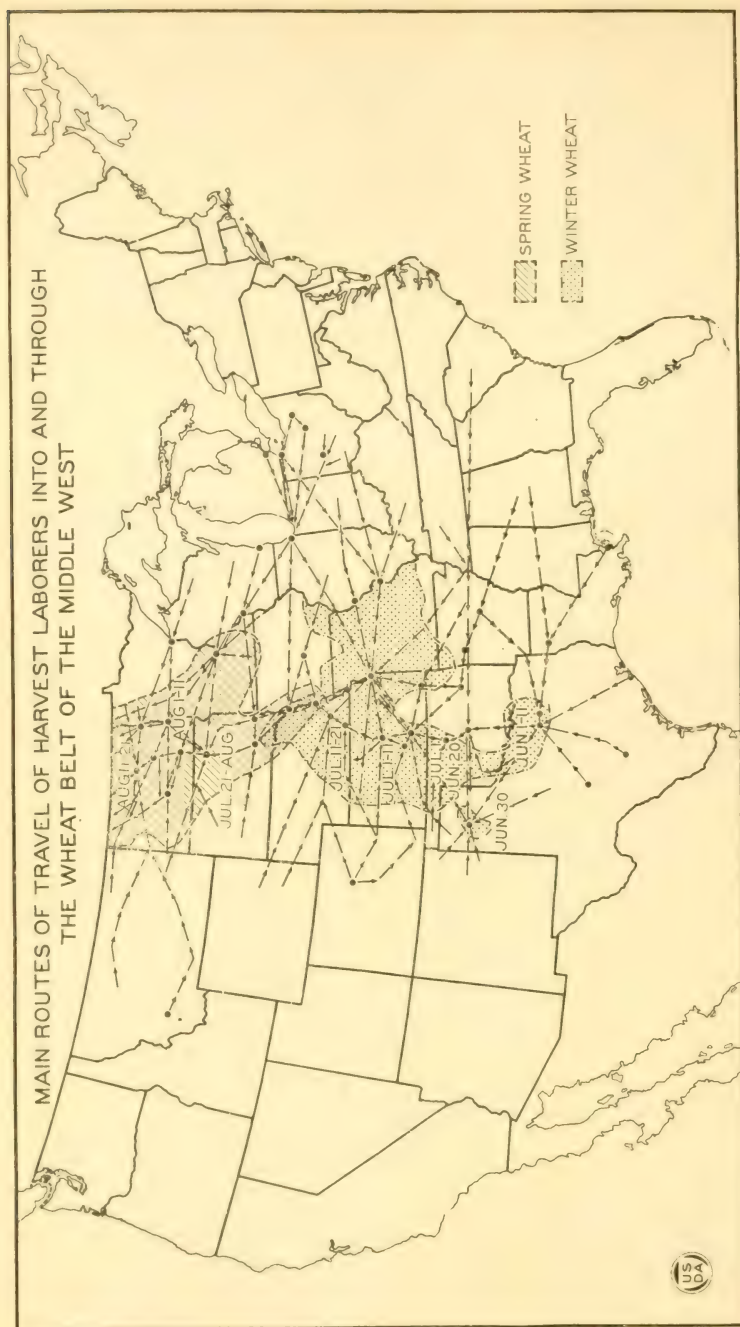


FIG. 10. This group of harvest laborer movements shows that they do not follow the season northward but move chiefly westward and eastward.

EXTENT AND DIRECTION OF MIGRATION.

There is a widespread impression that the harvest "army" enters the harvest in Oklahoma and Kansas and sweeps northward through the ripening grain across the Dakotas and on into Canada. This is far from true. The major portion of the harvest work of each State is done by the men who work only in that State; a large contingent of men work in more than one State, but confine themselves to the winter-wheat belt; another contingent works only in the spring-wheat harvest; a small minority go northward with the harvest from Oklahoma to the Dakotas or Canada. (See fig. 10.)

TABLE 15.—States in which harvest hands interviewed in 1921 worked in 1919 or 1920 and in 1921.

States.	Number who worked in each State or group of States in—	
	1919 or 1920.	1921.
In winter-wheat States only:		
Texas.....	9	4
Oklahoma.....	32	18
Kansas.....	100	88
Iowa.....	12	6
Missouri.....	4	2
Texas, Oklahoma, Kansas and Nebraska (or 2 or 3 of these 4 States).....	51	50
Oklahoma and Missouri; Arkansas, Colorado or Southern States outside the Wheat Belt.....	6	4
Kansas and Missouri; Missouri, Arkansas or other Southern States, excluding Texas and Oklahoma.....	17	7
Kansas and Iowa; Nebraska or Colorado or 2 of these 4 States.....	32	13
Total.....	263	192
In spring-wheat States only:		
South Dakota.....	21	19
North Dakota.....	125	258
South and North Dakota.....	20	30
Minnesota.....	6	2
Montana.....	9	8
Canada.....	8	8
The Dakotas and Minnesota.....	33	66
The Dakotas and States outside the Wheat Belt.....	2	7
The Dakotas and Montana.....	3	7
The Dakotas and Canada.....	15	88
Total.....	242	477
In both winter and spring wheat States:		
Texas, Oklahoma, or Kansas to Nebraska or Iowa or Colorado and the Dakotas.....	52	202
Texas, Oklahoma, or Kansas to the Dakotas and Canada.....	11	41
Texas, Oklahoma, or Kansas to the Dakotas or Minnesota (jumping Nebraska).....	41	3
Nebraska, Iowa, Missouri, or Arkansas to the Dakotas or Minnesota.....	29	19
Texas, Oklahoma, Kansas, Nebraska, or Iowa to the Dakotas and Montana or to Montana.....	5	2
Total.....	138	267
Total, all harvests.....	401	659
Did not work in harvest in 1919 or 1920.....	340	.....
Harvested in States not in Wheat Belt.....	.....	.....
Summary of harvesters' work:		
Outside the Wheat Belt.....	36	.....
In the Wheat Belt.....	643	936
In any harvest.....	679	936
In winter wheat only.....	263	192
In spring wheat only.....	242	477
In both winter and spring wheat.....	138	267
In 1921 harvest only.....	.....	340

The migrations of 936 men in the 1921 harvest, and of 679 of the same men in the 1919 and 1920 harvests, are shown in Table 15. Eighty-three of the men who did not know what routes they would follow during the remainder of the 1921 harvest were not included in the table. Added to the 936, these bring the total number of men interviewed on this subject to 1,019. Of these, 376 did not work in the wheat harvest of the central Wheat Belt in 1919 or 1920. Of the other 643, 263, or 40.9 per cent, worked only in the winter wheat; and 138, or 21.5 per cent, worked in both the winter and the spring wheat. One out of five of these transient harvest hands "followed the harvest" northward. In 1921, 192, or over 20.5 per cent of the groups, worked only in the winter wheat; 477, or 51 per cent, worked only in the spring wheat, and 267, or 28.5 per cent, nearly one in three, made the trip from south to north. In considering the figures cited, it must be borne in mind that the entire group studied consisted of transient harvest hands. The tens of thousands of harvest hands whose homes are in the wheat States are entirely omitted from consideration. Of the entire harvest force working for wages, but a small percentage work in the harvests of several States. Of the group studied in the table, 49.5 per cent worked in but a single State in 1919 and 1920 and 42.4 per cent in 1921.

CONCLUSIONS.

The facts presented in this bulletin suggest that advertising for harvest labor should be confined to the Wheat Belt and the Mississippi Valley.⁸ The bulk of the harvest-labor supply comes from States west of central Ohio. The portion that comes from the East is an insignificant fraction of the total harvest-labor supply. A harvest hand can not come from points farther east than Ohio and earn enough in the harvest to pay him for coming. Industrial workers in the East, such as factory hands and construction workers, should not be attracted to the harvest by official advertising. If they wish to come without solicitation, as some will always do, it is their own affair. But Federal and State officials should not attract them by advertising, in view of the heavy expense for travel to and within the harvest territory and the probable loss of half of their working time while in the harvest area.

Special harvest excursions at reduced rates should be provided by the railroads, with round-trip rates, tickets to be good for return within 90 days of date of sale. In Canada a harvest hand can go from Quebec to Saskatchewan for the fare that it costs an American harvest hand to go from St. Louis or Chicago to harvest work in Kansas.

A more comprehensive machinery should be provided by co-operation of Federal-State employment officials and the State and county agricultural officials for the redistribution of harvest hands. It is necessary to provide better facilities for helping the men to move on from one harvest job to another. The employment offices at present functioning get the men out quickly to their first harvest job. But when the men complete their first jobs they are far from the

⁸ It has been demonstrated that the labor supply available in the Mississippi Valley will care for the crop. See "Sources of Supply and Conditions of Employment of Harvest Labor in the Wheat Belt," U. S. Dept. of Agri., Dept. Bull. 1230.

employment offices, frequently have no one to give them accurate information concerning the next places that need their services, and are forced to depend upon their own judgment or chance information or else go back to the relatively small number of cities within the territory where employment offices are located, and be sent out again by the employment offices. As this would mean a journey of a couple of hundred miles, many harvesters dispense with the services of the employment officials after getting their first jobs.

The citizens of each county are very active as long as they need labor, but when their own crop is cared for, naturally settle back with a complacent feeling that all is well and the harvest is over. They do not realize that they have any further responsibility to the men who have worked in their fields. Some one in each county, generally the county agent or farm bureau if there is one, should be given definite instructions, guidance, and responsibility for forwarding the labor of that county, as soon as set free, to the next area where it is needed. If this were done systematically, the harvest could be handled with at least a 25 per cent smaller number of laborers and with much better earnings per man for the harvest hands. The failure to meet this situation is to-day the most serious shortcoming of the agencies distributing harvest labor.

APPENDIX.

TABLE I.—Relative earnings and expenses of 32 harvesters in 1921 harvest whose earnings had been less than \$100 and expenses \$50 or over at time of interview.

	State in which man began harvesting.	State in which interviewed.	Total number of days—			Number of harvest jobs obtained.	Earnings.	Expenses for—		Surplus or deficit of earnings compared with expenses.	
			In harvest area.	Worked.	Idle or traveling.			Subsistence while idle.	Traveling.	Surplus.	Deficit.
1	Oklahoma	Kansas	28	7	21	1	\$35.00	\$52.50	\$10.00	.....	\$27.50
2	do.	do.	42.5	13.5	29	3	58.00	72.50	30.00	.....	44.50
3	do.	Iowa	37	17	20	1	85.00	50.00	40.00	.....	5.00
4	Kansas	Kansas	40.5	20.5	20	2	93.00	50.00	3.00	\$40.00	.....
5	do.	Iowa	32	12	20	1	60.00	50.00	.....	10.00	.....
6	do.	North Dakota	52	17	35	1	85.00	87.50	40.00	.....	42.50
7	do.	Iowa	50	20	30	1	50.00	75.00	50.00	.....	75.00
8	do.	North Dakota	44	15	29	1	90.00	72.50	Auto.	.....	.....
9	do.	do.	44	16	28	1	96.00	70.00	Auto.	.....	.....
10	do.	Iowa	27	.....	27	.....	.....	67.50	.....	.....	67.50
11	do.	North Dakota	44	21	23	5	81.25	57.50	16.00	7.75	.....
12	do.	do.	40.5	13.5	27	3	58.50	67.50	.....	.....	9.00
13	do.	do.	46	14	32	1	70.00	80.00	.....	.....	10.00
14	do.	do.	56	20	36	3	68.00	90.00	.....	.....	22.00
15	do.	Kansas	35	.....	35	.....	.....	87.50	.....	.....	87.50
16	Iowa	North Dakota	54	14	40	3	58.50	100.00	.....	.....	41.50
17	Nebraska	do.	47	10	37	3	57.00	92.50	45.00	.....	80.50
18	do.	do.	46	23	23	3	80.00	57.50	16.00	6.50	.....
19	Missouri	do.	65	5	60	1	20.00	150.00	.....	.....	130.00
20	Illinois	do.	56.5	14.5	42	2	84.50	105.00	.....	.....	20.50
21	South Dakota	do.	41	20	21	1	70.00	52.50	.....	17.50	.....
22	do.	do.	41.5	16.5	25	1	58.00	62.50	.....	.....	4.50
23	do.	do.	20	.....	20	.....	.....	50.00	.....	.....	50.00
24	Wisconsin	do.	47	14	33	1	21.00	82.50	.....	.....	61.50
25	Minnesota	do.	46	21	25	2	67.50	72.50	.....	.....	5.00
26	do.	do.	38	15	23	1	30.00	57.50	.....	.....	27.50
27	do.	do.	39	7	32	1	17.50	80.00	.....	.....	63.50
28	do.	do.	39	7	32	1	21.00	80.00	13.82	.....	72.82
29	North Dakota	do.	57	16	41	1	56.00	102.50	5.00	.....	51.50
30	do.	do.	31	8.5	22.5	4	33.50	56.50	12.00	.....	35.00
31	do.	do.	35.5	8.5	27	2	27.00	67.50	.....	.....	40.50
32	do.	do.	35	10	25	1	35.00	62.50	56.00	.....	83.50
Total			1,357	416.5	940.5	52	1,666.25	2,361.50	336.82	81.75	1,583.32
Average			42.4	13	29.4	1.6	52.07	73.80	10.53	16.35	46.33

¹ Obtained by subtracting average earnings from average subsistence cost plus average railroad expenses for five harvesters reporting surplus.

² For 25 harvesters reporting deficit

TABLE II.—Relative earnings and expenses of 83 harvesters in 1921 harvest whose earnings had been \$100 or more up to time of interview.

	State in which man began harvesting.	State in which interviewed.	Total number of days—			Number of harvest jobs obtained.	Earnings.	Expenses for—		Surplus or deficit of earnings compared with expenses.	
			In harvest area.	Worked.	Idle or traveling.			Subsistence while idle.	Traveling.	Surplus.	Deficit.
1	Texas	North Dakota.	95	50	45	2	\$500.00	\$112.50		\$387.50	
2	do.	do.	69	39	30	2	436.00	75.00	\$36.00	325.00	
3	do.	do.	69	45	24	6	288.50	60.00	75.00	153.50	
4	do.	Kansas	33	27	6	3	135.00	15.00		120.00	
5	do.	North Dakota.	72	27	45	4	114.00	112.50		1.50	
6	Oklahoma	Oklahoma.	28	21	7	1	120.00	17.50	16.00	86.50	
7	do.	Kansas	36	35	1	1	175.00	2.50		172.50	
8	do.	do.	40	20	20	2	75.00	50.00		25.00	
9	do.	Oklahoma.	26	23	3	2	125.00	7.50		117.50	
10	do.	do.	35	31	4	2	110.00	10.00		100.00	
11	do.	do.	35	31	4	2	110.00	10.00		100.00	
12	do.	Kansas	21	20	1	2	120.00	2.50		117.50	
13	do.	do.	23	20	3	1	100.00	7.50		92.50	
14	do.	do.	27	20	7	3	113.00	17.50	10.00	85.50	
15	do.	do.	23	20	3	2	113.00	7.50	5.00	100.50	
16	do.	do.	19	15	4	1	120.00	10.00	15.00	95.00	
17	do.	Oklahoma.	19	15	4	1	120.00	10.00	15.00	95.00	
18	do.	do.	55	27	28	3	135.00	70.00		65.00	
19	do.	do.	28.5	18.5	10	2	140.00	25.00	83.00	32.00	
20	do.	do.	41	22	19	2	108.00	47.50	30.00	30.50	
21	do.	Kansas	21	18	3	1	106.00	7.50	17.00	81.50	
22	do.	do.	30	23	7	2	111.00	17.50		93.50	
23	do.	Iowa.	37	32	5	3	153.00	12.50		140.50	
24	do.	do.	37.5	22.5	15	4	164.00	37.50		126.50	
25	do.	do.	37.5	32.5	5	4	170.00	12.50		157.50	
26	do.	North Dakota.	69	26	43	2	114.00	107.50		6.50	
27	do.	do.	38	35	3	1	140.00	7.50		132.50	
28	do.	do.	60	40	20	1	160.00	50.00		110.00	
29	do.	do.	52	24	28	3	120.00	70.00		50.00	
30	do.	do.	35.5	31.5	4	2	155.00	10.00	26.00	119.00	
31	Kansas	Kansas	19	16	3	2	128.00	7.50		120.50	
32	do.	do.	31	28	3	1	220.00	7.50		212.50	
33	do.	do.	31	20	11	1	100.00	27.50	11.75	60.75	
34	do.	do.	27.5	18.5	9	2	109.00	22.50	31.00	55.50	
35	do.	do.	29	25	4	1	125.00	10.00		115.00	
36	do.	Nebraska	28	25	3	2	100.00	7.50		92.50	
37	do.	South Dakota.	40	28	12	3	140.00	30.00		110.00	
38	do.	Iowa	32	23	9	2	103.00	22.50	25.00	55.50	
39	do.	do.	37	30	7	2	120.00	17.50		102.50	
40	do.	do.	39	22	17	2	102.00	42.50	54.00	5.50	
41	do.	do.	39	22	17	2	102.00	42.50	54.00	5.50	
42	do.	do.	23	17	6	1	102.00	15.00	20.00	67.00	
43	do.	North Dakota.	55	20	35	1	100.00	87.50		12.50	
44	do.	do.	49	35	14	2	175.00	35.00	50.00	90.00	
45	do.	do.	64	33	31	5	169.50	77.50		92.00	
46	do.	do.	39	18	21	2	108.00	52.50		55.50	
47	do.	do.	66	43	23	4	217.00	57.50	Auto.		
48	do.	do.	65	26	39	2	130.00	97.50		32.50	
49	do.	do.	32	24	8	4	100.00	20.00		80.00	
50	do.	do.	44	37	7	3	181.00	17.50		163.50	
51	do.	do.	52	22	30	1	132.00	75.00		57.00	
52	do.	do.	55	34	21	3	154.00	52.50	25.00	76.50	
53	do.	do.	54	40	14	5	192.50	35.00		157.50	
54	do.	do.	30	20	10	2	100.00	25.00		75.00	
55	do.	do.	47	26	21	2	113.00	52.50		60.50	
56	Missouri	do.	49	21.5	27.5	3	112.50	27.50	26.00	59.00	
57	do.	do.	30	28	2	3	110.00	5.00		105.00	
58	do.	do.	30	28	2	3	110.00	5.00		105.00	
59	Kansas	do.	56	20	36	2	200.00	90.00	177.00		\$67.00
60	do.	do.	69	47	22	3	354.00	55.00	51.00	248.00	
61	do.	do.	69	23	46	2	128.00	115.00	30.00		17.00
62	do.	do.	71	48	23	2	250.00	57.50	Auto.		
63	Nebraska	do.	46	29.5	16.5	3	102.50	42.50		60.00	
64	Wisconsin	do.	41	30.5	10.5	2	269.00	27.50		241.50	
65	Minnesota	do.	25	22	3	1	176.00	7.50	Auto.		
66	do.	do.	43	36.5	6.5	2	113.50	16.50		97.00	
67	do.	do.	60	60		1	130.00		12.00	118.00	
68	do.	do.	56	30	26	2	135.00	65.00		70.00	
69	do.	do.	36	17	19	1	102.00	47.50	9.40	45.10	
70	South Dakota	do.	23	16	7	1	160.00	17.50	9.00	133.50	

TABLE II.—*Relative earnings and expenses of 83 harvesters in 1921 harvest whose earnings had been \$100 or more up to time of interview—Continued.*

	State in which man began harvesting.	State in which interviewed.	Total number of days—				Earnings.	Expenses for—		Surplus or deficit of earnings compared with expenses.	
			In harvest area.	Worked.	Idle or traveling.	Number of harvest jobs obtained.		Subsistence while idle.	Traveling.	Surplus.	Deficit.
71	North Dakota.	do.	35	33	2	3	\$166.00	\$5.00	\$16.00	\$145.00	
72	do.	do.	35	33	2	3	166.00	5.00	16.00	145.00	
73	do.	do.	29	8	1	1	126.00	2.50	20.00	103.50	
74	do.	do.	15	11	4	1	132.00	10.00	16.00	106.00	
75	do.	do.	30	28	2	1	112.00	5.00	24.00	83.00	
76	do.	do.	25	21	4	2	246.00	10.00	45.00	191.00	
77	do.	do.	23	22.5	.5	2	105.00	1.25	10.00	93.75	
78	do.	do.	66	28	38	1	112.00	96.00	60.00		\$44.00
79	do.	do.	49	31.5	17.5	3	103.00	45.00	5.00	53.00	
80	do.	do.	53	28.5	24.5	4	116.00	76.00	70.00		30.00
81	do.	do.	55	33	22	2	103.00	55.00	20.00	28.00	
82	do.	do.	22	12.5	9.5	1	122.00	25.00	10.00	87.00	
83	do.	do.	32	28	4	2	128.00	10.00	13.00	105.00	
Total			3,412.5	2,258.5	1,154.0	181	12,163.00	2,864.75	1,238.15	7,697.60	158.00
Averages..			41.1	27.2	13.9	2.2	146.54	34.52	14.92	101.28	39.50

¹ Average for 76 cases reporting surplus.² Average for 4 cases reporting deficit.

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FEBRUARY 7, 1924.

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